- 60. (Amended) A method of purifying [hsp70-peptide] heat shock protein-70 peptide complexes from a cell comprising:
 - (a) homogenizing the cell with a hypotonic buffer solution to produce a cell lysate;
 - (b) centrifuging the cell lysate to obtain a supernatant;
 - (c) running the supernatant over an ADP-agarose column;
 - (d) washing the ADP-agarose column with a buffer containing ADP; and
 - (e) collecting the [hsp70-peptide] heat shock protein 70-peptide complexes [complex].
- 61. (Amended) A method of purifying [hsp70-peptide] heat shock protein-70 peptide complexes comprising:
 - (a) contacting a sample containing cellular proteins with a nonhydrolyzable analog of ATP affixed to a solid substrate under conditions such that [hsp] heat shock protein 70 in the sample can bind to the nonhydrolyzable analog of ATP; and
 - (b) eluting the [hsp] heat shock protein 70 bound to the nonhydrolyzable analog of ATP in step (a).
- 62. (Amended) A method for purifying heat shock protein 70 complexes comprising the steps of:

adding a solution containing a heat shock protein <u>70</u> complex comprising a heat shock protein <u>70</u> associated with at least one member of the group consisting of peptides[,] <u>and [polypeptides, denatured] proteins [and antigens associated therewith]</u>



to an ADP matrix column containing an ADP matrix to bind the heat shock protein <u>70</u> complexes to the ADP matrix; and

adding a buffer containing ADP to the column to remove the heat shock protein <u>70</u> complexes in an elution product:

- 65. (Amended) A method for synthesizing heat shock protein 70 complexes, comprising adding a heat shock protein 70 and an antigenic molecule selected from the group consisting of peptides[,] and [polypeptides, denatured] proteins, [and antigens] to a buffer containing ADP to allow the heat shock protein 70 to bind to the antigenic molecule and ADP to form a heat shock protein 70 complex.
- 66. (Amended) The method of Claim 65, wherein the solution containing the heat shock protein 70, antigenic molecule and ADP is incubated at 37° C to induce heat shock protein 70 present in the solution to bind to peptides[,] and [polypeptides, denatured] proteins [and antigens] present in the solution to form heat shock protein 70 complexes.
- 71. (Amended) The ADP-heat shock protein 70-peptide complex of Claim 68, wherein said ADP-heat shock protein 70-peptide complex comprises a [synthetic] heat shock protein 70-peptide complex made in vitro.



72. (Amended) The ADP-heat shock protein <u>70</u>-peptide complex of Claim 71, wherein said [synthetic] heat shock protein <u>70</u>-peptide complex comprises a heat shock protein <u>70</u> and a peptide from the same individual.

- 73. (Amended) The ADP-heat shock protein <u>70</u>-peptide complex of Claim 71, wherein said [synthetic] heat shock protein <u>70</u>-peptide complex comprises a heat shock protein <u>70</u> from a first individual and a peptide from a second, different individual.
- 74. (Amended) The ADP-heat shock protein 70 peptide complex of Claim 71, wherein said [synthetic] heat shock protein 70 peptide complex comprises a heat shock protein 70 from a first organism and a peptide from a second organism.
- 75. (Amended) The ADP-heat shock protein 70-peptide complex of Claim 71, wherein said [synthetic] heat shock protein 70-peptide complex comprises a heat shock protein 70 from a first species and a peptide from a second species.
- 76. (Amended) The ADP-heat shock protein 70-peptide complex of Claim 68, wherein the ADP-heat shock protein 70-peptide complex is purified by the steps of:

 adding a heat shock protein complex comprising a heat shock protein 70
 associated with at least one member of the group consisting of peptides[,] and [polypeptides, denatured] proteins [and antigens associated therewith] to an ADP matrix column containing an ADP matrix to bind the heat shock protein 70 complexes to the ADP matrix; and adding a buffer containing ADP to the column to remove the heat shock protein 70-peptide complexes in an elution product.
- 77. (Amended) The ADP-heat shock protein <u>70</u>-peptide complex of Claim 68, wherein the ADP-heat shock protein <u>70</u>-peptide complex is synthesized by adding a heat shock protein <u>70</u> and an antigenic molecule selected from the group consisting of peptides[,]

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and [polypeptides, denatured] proteins,[and antigens] to a buffer containing ADP to allow the heat shock protein 70 to bind to the antigenic molecule and ADP to form a heat shock protein 70 complex.

Please add the following new claims:

- 78. (New) The method of claim 62, wherein said member is a peptide.
- 79. (New) The method of claim 65, wherein the antigenic molecule is a peptide.
- 80. (New) The method of Claim 65, wherein the antigenic molecule is a peptide, and wherein the solution containing the heat shock protein 70, peptide and ADP is incubated at 37°C to induce heat shock protein 70 present in the solution to bind to the peptide present in the solution to form heat shock protein 70-peptide complexes.
 - 81. (New) The method of claim 76, wherein said member is a peptide.
- 82. (New) An ADP-heat shock protein 70-protein complex in substantially purified form.
- 83. (New) The ADP-heat shock protein 70-protein complex of Claim 82, wherein said heat shock protein 70 comprises one of the group consisting of DnaK proteins from prokaryotes; Ssa, Ssb, and Ssc from yeast; hsp70, Grp75 and Grp78(Bip) from eukaryotes.

- 84. (New) The ADP-heat shock protein 70-protein complex of Claim 83, wherein said ADP-heat shock protein 70-protein complex comprises a heat shock protein 70-protein complex made in vitro.
- 85. (New) The ADP-heat shock protein 70-protein complex of Claim 84, wherein said heat shock protein 70-protein complex comprises a heat shock protein 70 and a protein from the same individual.
- 86. (New) The ADP-heat shock protein 70-protein complex of Claim 84, wherein said heat shock protein 70-protein complex comprises a heat shock protein 70 from a first individual and a protein from a second, different individual.
- 87. (New) The ADP-heat shock protein 70-protein complex of Claim 84, wherein said heat shock protein 70-protein complex comprises a heat shock protein 70 from a first organism and a protein from a second organism.
- 88. (New) The ADP-heat shock protein 70-protein complex comprises a heat shock protein 70-protein complex comprises a heat shock protein 70 from a first species and a protein from a second species.
- 89. (New) The method of claim 62, wherein said member is a protein, wherein the heat shock protein 70 complex comprises a heat shock protein 70 associated with a protein, and wherein the heat shock protein 70-protein complex is made in vitro.